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ABSTRACT

A method is presented by which decision makers may establish priorities for the collection of data to be used as input to the decision-making process. It is assumed that the experience, intuition, and previously collected data will influence the decision, as will the constraints of design, and the audience to whom the particular decision is directed. The proposed method is applicable to relatively complex decisions. The roles assumed by the administrator, constraints on data collection, sources of data and variable categories, and formulation of priority task units are discussed as important aspects of the proposed method. To illustrate the process a priority task unit related to one aspect of school busing is presented. A priority task unit has five elements: (1) identification of a prime interest group; (2) identification of a key question asked by the prime interest group; (3) identification of the kinds of data needed to answer the key question; (4) identification of potential sources of data; and (5) identification of possible methods of obtaining needed data. (CK)

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No. 1

DATA COLLECTION FOR EDUCATIONAL
DECISION-MAKING: ESTABLISHING PRIORITIES

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DATA COLLECTION FOR EDUCATIONAL
DECISION-MAKING: ESTABLISHING PRIORITIES

The process of making decisions is an extremely vital component in the total educational system. It is also one of the least understood components. The highly technical literature on decision-making filters down to few individuals in positions requiring the making of decisions regarding various educational matters. Superintendents, principals, project directors--most "fly by the seat of their pants." Decisions are based primarily on previous experience and on data that may or may not have been intentionally collected for a given decision. Systematic data collection, prior to decision-making, has not been the rule but rather the exception. Often the intuitive, experientially-based decision yields admirable results. It appears, however, that the increasing complexity of education may inhibit the intuitive approach to decision-making.

The complexity of education and, correspondingly, the complexity of the decision-making process, is due primarily to the increasing number of alternatives available to educators, alternatives in almost every educational area. There are more kinds of textbooks, more kinds of audio-visual materials, more instructional techniques, more ways of getting money, more kinds of tables to buy for the teachers' lunchroom--there seem to be more kinds of everything. And because there are more things to choose among, with more variables to consider, and more experts to tell you what you ought to do or say, choosing an alternative or alternatives becomes increasingly a more complex process.

There seem to be a number of reasons for the increase in alternatives. The industrial world is awakening more and more to educational considerations. The federal government continues to show financial interest in

education. More people are focusing their attention on the problems of education and are proposing solutions to the problems. The result of the combination of these factors can be seen in the influx of new programs, projects, materials, theories, and practices appearing in all fields. To the decision-maker, confronting a particular problem in his own setting, these new ideas can be viewed as alternatives for the action he must take. And to make the most appropriate decision, he may want to be apprised of his alternatives.

The intent of this paper is to present a method by which decision-makers may establish priorities for the collection of data to be used as input in the decision-making process. Several assumptions underlie the presentation of this method. First, the decision-maker's experience, his intuition, and whatever data he has collected, in whatever manner, will influence the decision to be made. The second assumption is that the decision-maker must operate within certain constraints, generally making it impossible for him to collect all of the data he thinks he would like to have. Finally, it is assumed that the method to be proposed is applicable to decisions of relative complexity, as opposed to the kinds of decisions the decision-maker must make the moment he confronts a given situation.

Aspects of the proposed method will be discussed in the following order:

1. Roles assumed by the administrator
2. Constraints on data collection
3. Sources of data and variable categories
4. Formulation of priority task units

The term administrator will hereafter be used as the term denoting decision-maker.

To illustrate each aspect, an example decision situation will be used. It will be assumed that the administrator in the example case is the superintendent of a large, urban school district. He faces a decision as to whether his district should facilitate or institute busing as a means of obtaining racial balance and equal opportunity for all students in the district. It will be assumed that the consensus of opinion is that there are desirable and necessary goals. The question will not be, then, should we obtain racial balance, but, rather, how should we accomplish the task? The specific examples are not intended to be authoritative nor complete; a method of approaching the problem of data collection for decision-making is being suggested, as opposed to an actual operational utilization of the methods proposed.

Roles Assumed by the Administrator

In most school systems, the responsibility for making decisions such as the one in question, that is the possible implementation of a busing program in the district, rests ultimately in the hands of the superintendent. The superintendent of a district assumes a number of roles. The role he assumes at a given time is primarily dependent on the nature of the task before him, the people he is dealing with, or both. In most instances, role is determined by both factors. The assumed role is usually defined by what people expect the superintendent to do or say while performing a given task.

The superintendent is, first of all, a data gatherer or a monitor to and reservoir for that which concerns the individual elements which he must deal with in his profession. That is, he must know what students,

teachers, board members, community members, administrators, legislators, and educators in general are doing, thinking and feeling. The superintendent's office serves as a focal point for the accumulation of information; the superintendent is expected to know "what is going on." He thus plays a role characterized by his keeping his finger "on the pulse" of the system.

Secondly, the administrator plays the role of an intermediary among the various elements of his system. He is expected to bring to the Board the requests of teachers. He is expected to bring to the teachers the actions of the Board. He is expected to bring the ideas of the community to both the Board and the teachers, and is to report to the community the actions of teachers, Board members, and students. Now, it is not to be supposed that the superintendent can be the spokesman or champion of all of these elements, all of the time. He is, however, the prime communicator in the school district.

A third role the superintendent must play is that of the decision-maker. To many people, this is the role of the superintendent that affects them personally the most. The superintendent must continually make decisions about people, materials, ideas, about a wide variety of unique instances.

The superintendent is also called upon to play the role of a justifier. When decisions are made, justification for those decisions are expected, probably demanded, by one or more of the interest groups affected by the decision. Often the most difficult, this role will generally result in disappointment in--or bitterness toward--the superintendent being expressed by someone.

Finally, the administrator must also play the role of a professional educator, a person with unique skills and talents that can be brought to bear on educational problems. This role is pervasive; the body of knowledge which

the administrator possesses may be used to influence, to guide, to correct, to probe. This expertise may be used to expand limited perspectives that may be held by the various elements within the school community. It may be used to clarify opinions or ideas, or it may be used to expose inconsistencies in viewpoints.

In the process to be discussed later in this paper, it may appear that the administrator is merely reacting to the demands of his constituency, as opposed to providing leadership to the school community. Such is not the intended portrayal. The administrator must be acutely aware of the needs and ideas of the groups in the district, but we must also inject his expertise into the decision-making process.

In virtually every decision he makes, the superintendent plays each of these roles at sometime during the decision-making process. The five roles are illustrated in Figure 1.

Prior to making any decision, the superintendent will have some data at his disposal. How much and what kind of data will vary a great deal from situation to situation. The means by which the data were collected may be highly systematized, or may be highly informal. Regardless of amount, kinds, and means of collection, some data will be available.

While in the process of gathering data, the decision-maker will generally interact with different people about the data being gathered, or about data that has been gathered. The administrator will attempt to listen to and tell others of the views held by all interested parties, prior to the making of a decision.

The decision about a specific question is made on the basis of what the superintendent has learned as a data gatherer and as an intermediary. His own professional judgment will play a part in the decision-making process

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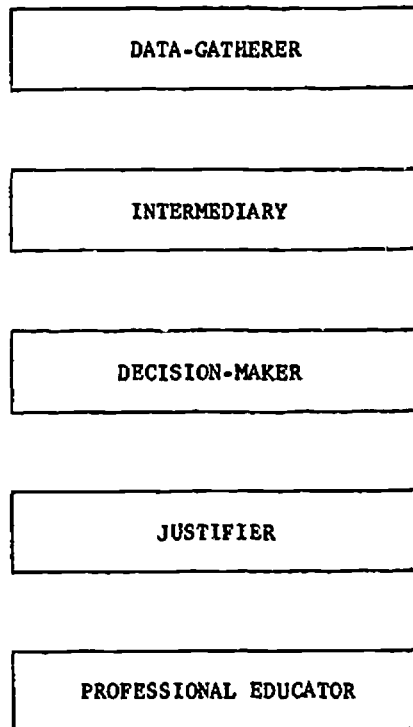


Figure 1
Roles Assumed by the Administrator

as well. Certainly, the kind of data collected will influence the manner in which the justifier role is played. The fact that a superintendent must play, willingly or reluctantly, all five roles, serves to emphasize the need for efficient data collection.

During any specific decision-making process, the amount of time and effort spent by the administrator in playing any one role may be quite different from the time and effort spent in a given role during another decision-making process. The most efficient decision-making would have the administrator function in each role only the minimal amount of time and with the minimal amount of effort required to make a sound decision. This infers the need to identify that point beyond which additional time, money, or personnel invested in playing a given role will not result in more advantageous consequences. The various roles played by the superintendent are closely related to the priorities established for data collection.

Constraints on Data Collection

Data collection can be an expensive proposition. Consequently, a realistic data collection plan must carefully consider the constraints within which the plan must operate, as these constraints will greatly influence how much data will be collected, and to some extent, what kind of data will be collected.

Constraints will differ from program to program. There are, however, certain key areas within which the administrator should look for possible constraints on his data collection plan:

1. The budget: What monies are available to the administrator for data collection? From what sources is

money available? What procedures will be necessary to obtain the money?

2. Personnel: What personnel can be used to assist in the data collection effort? How much of their total time can be devoted to data collection? What qualifications do the individuals need to possess to assist in the effort? Will training be required?
3. Time: What time limits will be imposed on the data collection effort?
4. Accessibility of data: Will the accessibility (or inaccessibility) of certain data impose restrictions on the collection of that data?
5. Format of data: Will the format of available data (that is, the form in which the data exists) restrict the usefulness of that data to the administrator?

After the administrator has considered these various areas of possible constraints, as applied to his own unique situation, he will be able to better ascertain realistic limits for his data collection efforts.

Sources of Data and Variable Categories

One of the assumptions upon which this paper is based is that the decisions for which this discussion is appropriate are relatively complex. It is reasonable to expect these decisions to involve a number of factors, or variables. In most instances relevant data may be obtained from a variety of sources. Data collection may be facilitated by identifying sources of data and variable categories that seem to have relevance to the particular

decision being made. These original ideas are tentative, and subject to change as the data collection plan unfolds.

Sources of data may be defined as persons or things that may contribute some kind of data that bears on the decision being made. In the beginning stages of the data collection process, the administrator may want to simply list possible sources of data, regardless of how much data or how little data he thinks each source might contribute. The advantage of listing all possible data sources is that such a listing serves to develop and maintain an awareness, on the part of the administrator, of potential sources of pertinent data that might otherwise be lost.

Although the sources of data actually used in data collection may differ from situation to situation, a general listing of data sources can be compiled, from which the administrator may choose those sources that are pertinent to his particular decision. This list of general data sources include:

- | | |
|-------------------|-----------------------------------|
| 1. Teachers | 6. Observers |
| 2. Students | 7. Experts (consultants, subject- |
| 3. Administrators | matter specialists, etc.) |
| 4. Parents | 8. Records (student cumulative |
| 5. The community | folders, business records, etc.) |

As the administrator examines the decision to be made, he may wish to identify, on a preliminary basis, the variables he feels must be considered in the decision-making process. As he begins to collect data, he may wish to add to or delete from this preliminary list of variables. The intent of this exercise is to provide a starting point from which the administrator may begin his planning for data collection.

To illustrate these strategies, let us consider briefly the administrator faced with the decision about busing. He may perceive each of the following as potential sources of data:

1. Teachers whose classes would be affected if busing were instituted.
2. The students in schools that would be affected in any way if busing were instituted.
3. The administrators, both at the district level and at the individual school level, particularly in schools that would be affected or involved in a busing program.
4. The parents of students who might be involved in a busing program.
5. The members of the community at large.
6. Experts, such as economic experts, sociologists, etc.

With these tentative ideas as to what sources of data he may consult, the administrator might also identify the variables he thinks have relevance to the busing issue. On a preliminary basis, the following might be stated as the variables to consider in the busing question:

1. Attitudes of the individuals involved in the busing program, including students, teachers, parents, etc.
2. Costs of a busing program.
3. Effects of busing on the quality of education, as well as the kind of education given to students.
4. Effects of busing on school-community relationships.

In reality, the administrator will undoubtedly list other variables. The above examples, however, are representative.

It might be said that the activities outlined above merely serve as preliminaries to the central task of the administrator and the development of a data collection plan. How much time or effort is devoted to identifying constraints, listing possible sources of data, and describing potential variables, will be a matter of individual choice. The activities do provide some direction to data collection and serve as a helpful background for the more specific developmental aspects of a data collection process.

Formulation of Priority Task Units

The administrator may facilitate the development of priorities for data collection by formulating priority task units. In general, priority task units isolate questions relevant to the decision being made and order these questions in a hierarchial arrangement from most important or strategic to least important. By developing task units, the administrator has the capability of segmenting his task into workable sections. He may put the units together in a manner that will enable him to attain maximum usable data within the constraints imposed upon him.

There are five levels of activity in a priority task unit. At Level One, a prime interest group is specified. At Level Two, the administrator identifies a key question raised by the prime interest group. Level Three identifies the kind of data that will be needed to respond to the key question. At Level Four, possible sources of relevant data are specified. Finally, at Level Five, possible methods of obtaining needed data from the appropriate data sources are suggested. The five levels in a priority task

unit are illustrated in Figure 2. Each of the five levels will be discussed in detail.

I would like to first describe the content of a priority task unit in general, then illustrate the application of the process by again using an example from the busing decision.

To begin the process, the administrator identifies the group (or groups) he feels will exert the greatest influence on the decision to be made, or the group that will be most interested in the decision. Specification of this group may be made in general terms, such as those terms used earlier to suggest general data sources (teachers, students, administrators, etc.). More often, however, the administrator will specify a particular subset of those general groups (art teachers, seventh-grade students, secondary-school administrators, etc.). The group(s) thus identified may be referred to as prime interest group(s).

The decision as to what group or groups to identify as prime interest groups will be based on the information the administrator gathers while playing the intermediary role. This role brings the administrator into contact with the various interest groups. From the attitudes and actions exhibited by these groups, the administrator assesses the relative influence and interest of the various groups and decides which group is of prime importance.

The degree of specificity desired in naming prime interest groups will be largely a function of the kind of decision being made. For example, if the decision concerns the busing of students from an inner city school to a suburban school, the group "teachers" may be an appropriate level of specificity.

PRIORITY/ TASK UNIT

**Level 1
Prime Interest Group**

**Level 2
Key Question**

**Level 3
Data Needed to Respond
to Key Question**

**Level 4
Potential Sources
of Data**

**Level 5
Possible Methods
of Obtaining Data**

Figure 2

**Activities Included
in a Priority Task Unit**

The group identified as the prime interest group is specified at Level One in the priority task unit. Only one group should be specified in any one unit. If more than one prime interest group is named, each group must be specified at Level One of separate task units.

A word of caution is in order at this point. There is always the possibility that a particularly powerful group may be most influential in any decision that is made. In this situation, the administrator faces the responsibility of not becoming a reactant to that group only, at the expense of other important but less powerful groups in the community. The administrator as a professional educator must provide some leadership to the educational process at this point. Prime interest groups are not necessarily prime vocal groups.

Having identified the prime interest group, the administrator poses key questions related to that interest group. A key question may be defined as a question members of the prime interest group will most want answers to, with respect to the decision being made by the administrator.

The administrator can expect to receive many questions, particularly as he plays the role of justifier. This role will be played most efficiently if the administrator has at his disposal the data he needs to respond to the questions directed at him. It may be unreasonable to assume that the administrator can have data to answer all potential questions. The intent of specifying key questions, prior to extensive collection of data, is to provide guidelines for collecting data to be used in responding to the most vital, or key, questions.

The administrator may formulate the key questions, based on his dealings with the prime interest group. As an alternative, he may solicit

key questions from the interest group. After some combining, altering and/or discarding, a workable list of key questions may result. These may be ordered as to importance.

Each of the key questions should appear in a separate priority task unit at Level Two. The degree of specificity of the key question is left to the discretion of the administrator. It is doubtful, however, that global questions will be of much value.

The administrator will recognize the necessity of knowing how the prime interest group feels about the decision to be made. The interest group will seek answers to the key questions raised at Level Two. Having identified these questions, the administrator can turn to the problem of determining what data he will need to supply answers to the key questions.

Many of the kinds of questions raised at Level Two will involve a number of variables. The administrator must first determine what variables must be attended to if he is to answer the key question(s) posed to him by the prime interest group. The variable categories the administrator has outlined may be of benefit at this point. Perhaps of more use will be the direction offered by the Stake (1967) evaluation model. Although the Stake model is regarded as an evaluation model, it is useful in considering data collection as well. The collection of data is, in fact, one of the primary aspects of evaluation, and evaluation of data is certainly a part of decision-making.

In an attempt to fully describe an educational program, Stake has developed a data matrix to serve as a guide for the collection of data. That same matrix can be utilized by the administrator in determining the kinds of data he needs to answer a key question. The data matrix is illustrated in Figure 3.

Three bodies of information should be included in considering data needs for the key question being asked:

1. Antecedents: any condition existing prior to teaching and learning which may relate to outcomes.
2. Transactions: the countless encounters of students with teachers, student with student, author with reader, parent with counselor--the succession of engagements which comprise the process of education.
3. Outcomes: includes measurements of the impact of instruction on teachers, administrators, counselors, and others. May also include data on costs, wear and tear, etc.

These three bodies of information are entered as rows in the data matrix.

Stake indicates four columns in the data matrix. These columns are labeled:

1. Intents: what educators intend.
2. Observations: what observers perceive.
3. Standards: what patrons generally expect.
4. Judgments: what judges value the immediate program to be.

The application of this model to the establishment of data collection priorities may not be readily apparent. Its primary usefulness is in creating an awareness within the administrator of the different ways in which a particular key question can be regarded. If he considers his question in terms of antecedents, transactions, and outcomes, he considers a wide range of variables that may influence answers to the key question. An example serves to illustrate this point.

Suppose the administrator is working on a key question having to do with the impact of a busing program on the attitudes of students toward school. In this hypothetical instance, the administrator may raise a series of questions which may be grouped as follows:

JUDGMENTS	STANDARDS	Antecedents		Transactions		Outcomes	
		INTENTIS	OBSERVATIONS	INTENTIS	OBSERVATIONS	INTENTIS	OBSERVATIONS

Figure 3
Data Matrix from the
Stake Evaluation Model

Antecedents

1. What attitudes were expected from the students prior to instituting the program? (Intent)
2. What were the observed or expressed attitudes of the students as the program was begun? (Observations)

Transactions

1. What transactions were planned that would influence student attitudes? (Intent)
2. What transactions actually occurred that might have influenced student attitudes? (Observations)

Outcomes

1. What were the intended outcomes of the program, with respect to student attitudes toward school? (Intent)
2. What were the observed outcomes of the program with respect to student attitudes toward school? (Observations)

The example is necessarily brief, but illustrative. Having completed this procedure, the administrator has more specific guidance as to what data he needs. In the above example, the administrator sees the need to measure student attitudes toward school before and after the students take part in a busing program. Data on the plans for the program are needed, i.e., statements of objectives. The administrator may want to examine the question of how much of what was intended actually occurred. All of this gives the administrator more insight into the program and provides a basis for the larger question, shall the program continue?

It may be unreasonable to claim that the Stake model is applicable to every key question that may be raised. For most questions, however, the

model does serve to more carefully systematize the manner in which the administrator approaches the problem of data collection. He is reminded that the answer to a particular question may have roots in prior conditions. The question may also be answered in terms of what happened during the course of the program, or what outcomes resulted from the program.

Once the administrator has determined the kind of data he needs, he can turn to the problem of where to get the needed data. At Level Four in the priority task unit, the administrator identifies possible sources of data.

Sources of data include all sources from which data needed to respond to the key question may be obtained. These sources of data, for listing in the priority task unit, should include any source, regardless of how limited a contribution the administrator thinks that source might make to the total amount of data collected.

Sources of data will, of course, change from question to question. The specific source described may be at a very general level, or may be very specifically defined. The administrator should strive to specify data sources so that he may eliminate costly attempts to obtain data from sources that have no relevant data.

Finally, at Level Five the administrator suggests possible methods of obtaining the necessary data. Again the idea of efficiency applies. The administrator will want to use the most efficient means possible to collect his data. Some of the methods that might be used in data collection are the following:

1. Tests

Tests may be of many kinds. Some of the kinds of tests that may provide data for decision-making include: achievement tests, intelligence tests, and other related standardized tests; teacher-made tests of content mastery and skill performance; school-wide tests of selected content or skills. These tests may take many forms: essay, short-answer, multiple choice, true-false, matching, situational, etc. There are recognized limitations of tests and their interpretations. They may, however, provide data unavailable from any other method.

2. Questionnaires

Questionnaires may be used to collect a variety of information from a number of sources. Carefully constructed questionnaires can provide data from sources such as parents, students, teachers, administrators, almost anyone.

3. Observations

A great deal of effort is going into the development of classroom observation techniques, designed primarily to analyze the verbal interactions in classrooms. Techniques--usually in the form of "schedules"--are being developed and modified by people such as Flanders (1966), Bellsack (1966), and others. The data gathered by this technique may be useful in responding to some of the key questions raised by prime interest groups.

4. Interviews

The interview may be utilized with a wide range of people, for any number of purposes. Interviews may be conducted with students, resource people, teachers, parents, administrators, members of the community. Interviews will often be used to obtain data not available through the use of tests or questionnaires.

5. Records

Existing records may provide much background data needed for decision-making. Cumulative student records, newspapers, journals, plus other records, will generally provide more substantial and accurate data, more easily, about what has happened, than may be obtained through interviews or questionnaires.

6. Self-reports

Self-reports, from students, teachers, administrators, or other sources, may be used to determine an individual's perception of himself, and of a particular program, or any other variable. The self-report could be called a questionnaire, but the role it plays in data collection for decision-making may be a unique one; therefore, it is listed here as a separate method.

The above list is, of course, highly general. It is thought that many of the specific techniques that could be mentioned will fall into one or more of these broad categories.

These five levels comprise the content of a priority task unit. Having constructed a number of units, the administrator may order the units with respect to those he can reasonably expect to complete within the constraints of the situation. Once the units are ordered, the administrator may begin the actual collection of data.

To illustrate the process proposed above, I would like to develop a priority task unit related to the question of busing. The example is not intended to be comprehensive nor authoritative, but simply illustrative. The particular key question identified may not be the key question; it will, however, serve to suggest the possibilities for priority task units.

There are many groups intensely interested in a decision about busing. Busing carries with it educational, political, economic, and sociological implications. The most influential group in a school district will differ from district to district. For the purposes of this example, I will specify two prime interest groups: parents of children in schools affected by the implementation of a busing program; and Board of Education members. The example priority task unit will focus on the former group.

Parents of children in schools affected by the busing program will raise many questions. Among them might be:

1. How will the busing program affect what the children are taught?
2. How will the busing program affect the attitudes of the children?
3. Will the busing program help children of different races get along better?

Again, to illustrate the use of a priority task unit, the first question above will be identified as the key question for the task unit.

What kind of data is needed to answer this question? The use of the Stake model provides some guidelines for this problem. Using that model, data concerning the following are needed:

Antecedents:

1. What is currently being taught to students in the inner city school?
2. What is currently being taught to students in the suburban school?
3. What are the prevalent teaching methodologies being used in the inner city school?
4. What are the prevalent teaching methodologies being used in the suburban school?
5. What books and materials are being used in the inner city school?
6. What books and materials are being used in the suburban school?

Transactions:

What content, methodologies, and materials are planned for use in the integrated classrooms resulting from a busing program? Will these differ from what is currently being used?

Outcomes:

What are the intended outcomes for students in classes integrated by busing? Will these outcomes differ from the outcomes currently happening?

At Level Four, the administrator identifies potential sources of data from which he can collect the data he needs. The most obvious source of data, for the key question raised by parents, is teachers. They will suggest what they plan to do and what the desired outcomes for the teaching program are.

Various records will supply still more data. Past teacher lesson plans, curriculum guides, records of faculty meetings--each of these will be helpful in providing data, particularly about antecedent conditions.

A third source of data might be experts, particularly observers. The kind of data that can be obtained by observers may not be attainable in any other way.

Finally, at Level Five the administrator suggests possible methods by which the data may be collected. In the example being discussed, the administrator may want to administer a questionnaire to teachers regarding their plans for teaching integrated classes. Data from this method could be supplemented with interviews conducted with a random sample of teachers.

Some type of checklist might be used to guide efforts to use the records discussed earlier. In most instances, however, the administrator will simply review the records, noting important or relevant pieces of information.

This completes the content of one priority task unit. The completed unit is shown as Figure 4.

The administrator faced with the busing question must not only decide whether to originally institute the program, but, having operated the program for a time, must decide whether to continue the program. As he faces this decision, he may again use priority task units to determine what data he needs to collect.

Having completed the development of priority task units, the administrator can set about actually collecting data. The resulting pool of data can then be analyzed and interpreted. The data may be described, compared, and judged. The judgment made for each priority task unit thus becomes input for the final decision-making steps and a decision is made.

PRIORITY TASK UNIT 1

Prime Interest Group:	Parents of children in schools affected by the implementation of a busing program.
Key Question:	How will the busing program affect what the children are taught?
Data Needed:	<p><u>Antecedents:</u></p> <p>What is currently being taught to students in the inner city school?</p> <p>What is currently being taught to students in the suburban school?</p> <p>What are the prevalent teaching methodologies being used in the inner city school?</p> <p>What are the prevalent teaching methodologies being used in the suburban school?</p> <p>What books and materials are being used in the inner city school?</p> <p>What books and materials are being used in the suburban school?</p> <p><u>Transactions:</u></p> <p>What content, methodologies, and materials are planned for use in the integrated classrooms resulting from a busing program? Will these differ from what is currently being used?</p> <p><u>Outcomes:</u></p> <p>What are the intended outcomes for students in classes integrated by busing? Will these outcomes differ from the outcomes currently happening?</p>
Sources of Data:	Teachers Records Experts
Possible Methods:	Questionnaires to teachers Checklist for examining records Observations

Figure 4

Summary

The evaluator may systematically determine his data collection priorities by segmenting his task into smaller units, called priority task units. Each unit consists of five elements:

1. Identification of a prime interest group.
2. Identification of a key question asked by the prime interest group.
3. Identification of the kinds of data needed to answer the key question.
4. Identification of potential sources of data.
5. Identification of possible methods of obtaining needed data.

The results of efforts to formulate priority task units will yield a number of these units. The administrator may decide he is capable of accomplishing all of the units; on the other hand, he may decide that constraints prohibit doing all of the units, and he therefore must choose from among the units. Having done this, the administrator collects and analyzes the data and inputs his conclusions into the final decision-making process.

This paper has illustrated the development of a priority task unit by applying the process to one aspect of a decision about busing. Many more such units could be developed on the same topic or on any other topic.

There is an implicit assumption being made that what is reported to one group with respect to a particular decision, may not be a satisfactory report for another group. Therefore, this paper has stated a need to clearly identify the audience to whom the administrator directs his efforts. Thus, particular groups are specified and key questions related to those groups are

identified with the aim of providing responses or answers designed for a particular audience. A further assumption is that delineation of who comprises the administrator's audience is essential.

One of the essential considerations in the proposed process is the specification of key questions. As I envision the process working, the identification of a key question is the result of careful deliberation and communication between the administrator and the prime interest group. The interest group has a responsibility to clearly state its concerns. The administrator has a responsibility to place these concerns in proper perspective. In fulfilling this responsibility, the administrator is more than a mere reactant to a situation. He must seek to bring his professional expertise to bear on the concerns at hand. He seeks to enlarge what may be limited perspectives held by the interest groups.

Effective decision-making and effective communication of that decision to all concerned parties, has some basis in the understandings among interested groups of what the others are doing and thinking. An administrator must be keenly aware of the concerns of interest groups and should attend to those concerns. However, simply attending to expressed concerns alone, without the input of the administrator's experience and ideas, may lead to less than desirable decision-making.

The reaction of most administrators to the proposed process is apt to be, "What is the payoff for investing the time and effort in developing priority task units?" The payoff is to be found in the efficiency of the data collection effort. By maximizing preparation for data collection, one minimizes the probabilities of collecting irrelevant data and further

minimizes the hit-and-miss style of data collection. In addition the development of units enables the administrator to more clearly see the variables operating in the decision situation.

How much of the total time and effort to be spent on data collection should be devoted to developing priority task units is open to question. Furthermore, the extent to which the process is applicable to all situations is not at this time clear. Only the testing of the process under actual conditions will provide answers to these unknowns.

Bibliography

- Bellack, Arno, et al. The Languages of the Classroom. New York: Teachers College Press, Columbia University, 1966.
- Caldwell, Michael S. Input Evaluation and Educational Planning. Columbus, Ohio: The Ohio State University, Evaluation Center, 1968. (Mimeo.)
- Flanders, Ned A. Interaction Analysis in the Classroom: A Manual for Observers. Ann Arbor: University of Michigan, 1965.
- Glass, Gene V. Two Generations of Evaluation Models. Paper presented to the Nebraska Personnel and Guidance Association, September, 1968. Boulder, Colorado: Laboratory of Educational Research, University of Colorado. (Mimeo.)
- Ott, Jack M. Classification System for Decision Situations: An Aid to Educational Planning and Evaluation. Educational Technology 9: 20-23; 1969.
- Scriven, Michael. "The Methodology of Evaluation." Perspectives of Curriculum Evaluation, AERA Monograph Series on Curriculum Evaluation 1. (Edited by Robert Stake.) Chicago, Illinois: Rand McNally Company, 1967, pp. 39-83.
- Stake, Robert E. The Countenance of Educational Evaluation. Teachers College Record 68: 523-540; 1967.
- Stufflebeam, Daniel and Westerlund, Stuart. The Evaluation of Context, Input, Process, and Product in Elementary and Secondary Education. Columbus, Ohio: The Ohio State University, Evaluation Center, 1967. (Mimeo.)
- Stufflebeam, Daniel L. Evaluation as Enlightenment for Decision-Making. Paper presented to the Association for Supervision and Curriculum Development (Commission on Assessment of Educational Outcomes), January, 1968. Columbus, Ohio: Evaluation Center, the Ohio State University. (Mimeo.)